

# PATENT COOPERATION TREATY

REC'D 22 JUN 2005

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From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/IB2004/052628

International filing date (day/month/year)  
01.12.2004

Priority date (day/month/year)  
10.12.2003

International Patent Classification (IPC) or both national classification and IPC  
H01L23/485, H01L21/60

Applicant  
PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1b/s(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IB2004/052628

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
Industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	-
	No: Claims	1-5
Inventive step (IS)	Yes: Claims	-
	No: Claims	1-5
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	-

**2. Citations and explanations**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: US 2003/178644 A1 (LEE JIN-HYUK ET AL) 25 September 2003 (2003-09-25)  
D2: US 2002/187634 A1 (SARAN MUKUL ET AL) 12 December 2002 (2002-12-12)  
D3: EP-A-0 875 934 (TEXAS INSTRUMENTS INCORPORATED) 4 November 1998  
(1998-11-04)

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-5 is not new in the sense of Article 33(2) PCT.
- 1.1 Document D1 (see figures 1, 2 and the corresponding text on paragraphs 10-16) discloses a semiconductor component comprising a semiconductor chip made of a doped silicon substrate 100, 102, which chip is doped into a semiconductor device and structured, and comprises an inner connection metallization 114 in a contact window, and said inner connection metallization 114 of said semiconductor chip is connected to the respective outer connection metalization by a wire bond connection (see D1, last line on paragraph 11), with the further features that the inner connection metallization 114 comprises a reinforcing system 108,110 having an open grid structure on the doped silicon substrate.  
The subject-matter of claim 1 on file does not differ therefrom.

In this respect it is noted that each of documents D2 (see figure 1-3 and the corresponding text on paragraphs 31-33) and D3 (see claims 1, 7 and 8 and the figures) discloses a reinforcing system for bond pads having an open grid structure. Claim 1 on file is merely describing a state of the art chip having bond pads reinforced by these known reinforcing systems. This subject-matter, if it is new at all, does not involve any inventive skill (Article 33(3) PCT).

- 1.2 The additional features of claim 2-5 are all known from each of documents D1 (see

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AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2004/052628

paragraphs 11, figures 1 and 2), D2 (see paragraphs 31 and 33; figures 3 and 6) and D3 (see claim 7; figures 1, 6 and 7).